

NAS NORTH ISLAND - NAVY REGION SOUTHWEST NAVY ENVIRONMENTAL LEADERSHIP PROGRAM

POLLUTION PREVENTION

PLASTIC MEDIA BLAST BOOTH

LEAD ACTIVITY

Naval Aviation Depot (NADEP) North Island

STATUS

Completed

MISSION

To reduce the use of methylene chloride paint strippers

DESCRIPTION

Naval Aviation Depot (NADEP) North Island reduced its reliance on chemical paint strippers by implementing plastic media blasting (PMB). PMB is a dry abrasive blasting process designed to replace chemical stripping. The blasting occurs in an enclosed, ventilated chamber or compartment and uses a stream of reusable plastic granular media propelled by a pressured air stream (20 to 30 pounds per square inch). After blasting, the spent media, dust, and debris are routed to a media recovery and reclamation system consisting of a magnetic separator, a cyclone centrifuge, and a vibratory screen. Typically, the media can be reused several times before becoming too small to remove paint effectively. Currently, NADEP is studying the use of media other than plastic, such as walnut shells, to reduce solid waste volume.

In addition, a glove box unit for PMB was procured through the Chief of Naval Operations (CNO) centralized procurement program and installed at Aircraft Intermediate Maintenance Department (AIMD) in 1994. The performance of the glove box unit is under evaluation.

BENEFITS

- Eliminates approximately 40,622 pounds of hazardous paint waste annually, resulting in a savings of \$81,244 per year
- Reclaims and reuses plastic media, resulting in additional cost savings of \$19,595 per year in material cost

UPDATED: 01/23/02